

OC-M81-504
29 June 1981

MEMORANDUM FOR: (See Distribution)

FROM:

[REDACTED]
Director of Communications

SUBJECT: OC Executive Board Agenda - July 1981

1. The OC Executive Board is scheduled to meet on
6 July 1981 (Monday) at 0900 hours in the D/CO Conference
Room [REDACTED] (U)

2. The only item on the agenda for the Board's con-
sideration is a review of selected courses (see attached)
[REDACTED] for change or elimination. (S)

Att:
OCHR-M81-256

Distribution:

- 1 - DD/CO w/att.
- 1 - C/OC-FND w/att.
- 1 - C/OC-ED w/att.

- [REDACTED]
- 1 - C/OC-CSD w/att.
 - 1 - C/OC-HRD w/att.
 - 1 - C/OC-SSD w/att.
 - 1 - C/OC-P&B w/att.

WARNING NOTICE--INTELLIGENCE
SOURCES AND METHODS INVOLVED

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OCHR-M81-256


MEMORANDUM FOR: Chairman, OC Executive Board

FROM:




 (C)

Chief, Human Resources Division, OC



SUBJECT:

Review of Selected Courses  (C) A9C3.4

25X1

1. Traditionally educational institutions readily add courses to their curricula, but eliminating obsolete or ineffective training programs is a more difficult task. To avoid this pitfall, the   has reviewed its curriculum and proposes to change or eliminate several courses. Attached are descriptions for the courses which do not seem to meet present Office requirements or which can be conducted more efficiently. If the recommendations proposed for each course under consideration are approved,  would be able to reallocate approximately 300 square feet to training on new systems. (S) A9C5.1

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2. To insure that any changes in the  curriculum are valid in terms of OC requirements, Executive Board approval is required. Consequently representatives for  have been scheduled to brief the Board on 6 July. The attached listing of courses provides a synopsis of the School's recommendations. (C) A9C3.4

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Attachment:
As stated

WARNING NOTICE
SENSITIVE INTELLIGENCE SOURCES
AND METHODS INVOLVED

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Course : OPS-300 (AFT-II Operator Training)

Description : Course is designed to train the operator in the day-to-day operation of the Automated Field Terminal (AFT-II). It provides the student with the ability to STARTUP, SHUTDOWN, and RESTORE the system as well as perform other functions necessary to keep station files, tables, and logs up-to-date. The student is taught message flow with the system and procedures for operating the SPILL position and CONSOLE. Some limited maintenance is presented along with COMSEC procedures as they pertain to shipment of hardware/software, emergency destruction, and terminal sanitization. All AFT-II commands are also taught.

Schedule : 5 resident runnings per year

CY80 Runnings : Resident: None
Field: 3 (total 10 Students)

Length : 120 hours

Class Size : Maximum 4 (resident)

Population Trained : 19

Value : If the student's first assignment is to an active AFT-II site, then OPS-300 will be mandatory.

Recommendation : Schedule runnings on a call-up basis only for those communicators who are assigned to an active AFT-II station. Area back AFT-II operators who are assigned to non-AFT stations should receive a one-week introductory course consisting of routinely used commands, OCR operations, console operations, opening and closing station procedures and AFT-II security requirements.

Alternatives : 1. No residency AFT-II training. All primary and backup operator training to be conducted on-site when AFT-II system initially activated. STAT

2. Training be conducted by DND trainers at facility.

3. Continue regularly scheduled quarterly runnings with a course length of 80 hours covering all operation aspects of the AFT-II. Maximum enrollment set for 3 operators.

Course : OPS-105 (Field Station Administration and Management)

Description : Course is divided into two segments with each segment presented separately.

Administration: Deals with the use of OC documents to guide the field station personnel in the performance of their duties.

Managerial: Concentrates on the role of the OC first-line manager and supervisor to impact the basic skills required to perform the management and supervisory functions necessary in a base or field station environment.

Schedule : 10 runnings per year

CY80 Runnings : 5 (11 students total)

Length : 80 hours

Class Size : Maximum 10

Population Trained : 239

Value : The course is valuable but is somewhat duplicative of OTE offerings. OTE's Fundamentals of Supervision and Fundamentals of Administration are better structured to meet the needs of the OIC and supervisor.

Recommendation : It is recommended that this course be reduced to 40 hours of self-study in administration only and that it be given on a call-up basis. Recommend that the existing OTE course be used to the management training objectives. The material used for the present course is in a constant state of change as the OC administrative policies are revised. The self-study method would not require an instructor to be present in the classroom at all times but be available for any questions the student may have.

Alternatives : Cancel all resident course runnings and provide the new manager/supervisor a self-study package at post or have the area headquarters administer the training.

Course : OPS-107 (KW-7 Limited Maintenance)

Description : Provides the student with block diagram level knowledge of the theory of operation as both a transmitter and a receiver; ability to make all adjustments specified in the KW-7 Limited Maintenance Manual; knowledge of external connections and signal characteristics; overall equipment troubleshooting ability by board substitution; understanding of TEMPEST considerations.

Schedule : 12 runnings per year

CY80 Runnings : 10 (total 45 students)

Course Length : 40 hours

Class Size : 6 Maximum

Population Trained : 411

Value : Highly valuable. This particular course is given to all communicators being assigned to KW-7 field stations. Due to the large number of personnel trained in this system, the number of requirements has dropped off and it is becoming apparent that it is no longer necessary to schedule monthly runnings of this course.

Recommendation : It is recommended that the number of scheduled yearly runnings be reduced to six (6), the minimum number of students required to start a running be established as three (3), with the maximum class size remaining at six (6). As the office moves toward more high-speed circuitry, the KW-7 is being utilized more as back than primary equipment. The equipment/classroom for the course is also used by the Technical Training Department for their full maintenance course which is 3 weeks in length. The equipment for this course also occupies the same classroom as the equipment for OPS-109. As we prepare the facility to receive new equipment for network modernization, it would not be feasible to provide separate classrooms for OPS-107, OPS-109, and the Technical Full Maintenance Course.

Alternatives : None

Course : OPS-108 (KW-26 Limited Maintenance)

Description : Designed to provide the student with detailed block diagram level knowledge of theory of operation; ability to perform all adjustments as specified in the limited maintenance manual; knowledge of external connections and signal characteristics; overall equipment troubleshooting ability by board or package substitution; an understanding of TEMPEST considerations as they relate to the KW-26.

Schedule : Call-up

CY80 Runnings : 3 (3 students total)

Length : 40 hours

Class Size : 3 maximum

Population Trained : 346

Value : This device is limited to just one area within the overseas network.

Recommendations : This course should be cancelled because of the number already trained, only 3 students were trained in 1980, and the equipment is only deployed in certain block countries. The number of people already trained should allow AEB to be more selective in assigning operators to KW-26 stations until this equipment is phased out completely.

Alternatives : The training could be provided at the area HQS enroute or by the area HQS at post after arrival.

Course

: OPS-109 (M-28 Limited Maintenance)

Description

: Provide the student with basic knowledge of M-28 and HW-28 operating theory to the assembly level; ability to perform selected minor adjustments and to replace selected parts; ability to troubleshoot to the assembly level; basic knowledge of applicable MWO's.

Schedule

: 11 runnings per year

CY80 Runnings

: 13 (total 63 students)

Course Length

: 40 hours

Class Size

: Maximum 6

Population Trained

: 473

Value

: Very valuable to any communicator being assigned to a field station. Due to the large number of employees that have already been trained, monthly runnings of this course are no longer needed.

Recommendation

: Recommend a reduction in scheduled runnings to six (6) per year, that the minimum number of students necessary to start a course be established as three (3) with the maximum number of students per course remaining at six (6). This recommendation is based on the population already trained, the training being included in the TCA program, and a world-wide replacement for this equipment at hand. The equipment used for this course occupies the same classroom as the equipment for OPS-107. As we prepare the facility to receive new equipment for network modernization, it would not be feasible to provide separate classrooms for OPS-107 and OPS-109. The classroom for this training is also used by the Technical Training Department for the KW-7 Full Maintenance course.

Alternative

: Designate the course as call-up and limited the enrollment to students going to posts where no OPS-109 trained employee is assigned.

Course

: OPS-115 (SC-1 Staff Satellite Operator Training)

Description

: Provides the student with:

1. Ability to properly operate the SC-1A and SC-1B satellite terminals using the vocoder, CCU, KG-13, and KW-7 ancillary equipment. This includes procedures for terminal cold starts, satellite acquisition, operation in teletype and alternate voice/data (AVD) modes, and methods to revert to back-up HF radio equipment in the event of system failure.

2. System troubleshooting utilizing system's internal test loops to locate faulty equipment and to substitute and/or bypass it where possible. System preventive maintenance is also included.

Schedule

: 5 runnings per year

CY80 Runnings

: 11 (58 students total)

Length

: 120 hours

Class Size

: Maximum 6

Population Trained

: 421

Value

: Valuable, however, student could receive enough training at post to become efficient until the SC-3 replacement is installed and on-site professional training is provided.

Recommendation

: Recommend that the running of the OPS-115 course on a regularly scheduled basis be changed to a limited call-up course depending upon the availability of an instructor and equipment, and that AEB be selective in choosing assignees to SC-1 posts and only choose individuals, if at all possible, who have had prior SC-1 training and experience. The SC-3 is rapidly replacing the SC-1 now installed in most of our satellite stations. The SC-3 is being installed at posts that do not have satellite capability at this time. One of the SC-1 terminals used for resident training has been removed from WCS and replaced with a second SC-3.

Alternative

: Assignee receive enough training at post by other operators to become efficient until the SC-3 replacement is installed and on-site professional training is provided.

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Course

Description

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Schedule

: 10 runnings per year

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CY80 Runnings

: 10 (total of 22 students)

Length

: 40 hours

Class Size

: Maximum 6

Population Trained

: 92

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Value

: None

Recommendations

: Recommend cancellation of the resident course at [redacted] Keeping an instructor and classroom space, both valuable commodities, occupied for one entire week to accomodate an average of 2 students is not cost effective especially when instructors are in high demand and classroom space is needed to house new equipment for the courses that will become necessary for network modernization.

Alternatives

: OTS perform the training or training be provided at post of assignment.

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3. Field [] communications training is given [] under the designation of OPS-117. It is often ad hoc in nature and aimed at the specific individuals and posts involved. OPS-117 is of greater value to the communicator than OPS-116 appears to be, but still falls short of meeting each student's needs in all cases. Equipment used in field [] communications training is held by [] on loan from OTS, and operational requirements often result in the removal of this equipment from the School. This prevents the student from seeing actual equipment until reaching the field. Many of the newer systems like [] have never been available to the School. The effectiveness of the training in terms of equipment availability is more often than not the product of the [] instructor's efforts to borrow specific items of interest to the student and the assigned post. (S) A9C2.2

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4. Training related to [] communications is included in the basic TCS programs [] Antenna theory, propagation, and HF communications skills are taught in OPS-101, the Panel D EOD program. A pilot self-study course for communicators in the field also covers these topics. The use of propagation charts has not been emphasized since the removal of a [] phase from EOD training, but is being returned to the [] curriculum this year. Improvements in Morse code skills training are also taking place in the forms of computer assisted instruction and more realistic testing procedures. Both of these actions will tend to enhance future resident and OJT programs in the field [] communications skills. (S) A9C2.2

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5. The Office of Communications is responsible for the management of position packages, but does not provide any for training in this work. OC is also responsible for conducting on-the-job training of base station communicators, but does not provide any formal training in these skills to supervisors. Training takes place certainly, but is not documented in such a way or to the degree that it can be used as a management tool to identify our resources in this area. (S) A9C2.2

6. Several options exist if we attempt to improve [] communications operational and managerial training. One option is to negotiate the transfer of [] communications training to the Office of Technical Services. This would be in keeping with the basis of our mutual agreement defining areas

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of interest and responsibility. No formal basis now exists for the tasking of OC [] with this training; it is done on the basis of a policy interpretation. OTS would have the option of contracting with OC to provide training and related services [] facility or at another site. One advantage of moving training to another location would be the freeing of classroom space within a vaulted area of the School for staff training purposes. Another advantage of a move from [] would be the end to a duplication of effort at [] and the [] facility; e.g., separate sets of identical equipment and other training material at two locations. (S) A9C2.2

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7. A second option is for OC to retain the training responsibility, but to drop all resident training and shift training to the field sites. [] could assist in formalizing OJT programs, in "training trainers", and in achieving the goal of standardized, valid, and documented training. Some training related to field station agent equipment might remain [] This idea could be expanded to encompass the work now done [] The services of an instructor from OTS would be required if this degree of consolidation were to take place. (S) A9C2.2

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8. An additional effort would be required in the area of facilities management skills. This would involve the preparation of a new course which would be taught [] if rotation schedules permitted or in the field as a self-study package. (C) A9C3.4

9. The present situation is not satisfactory. We fall short of what could be done with an effective reallocation of available resources, a sharing of responsibilities, and a clear definition of roles. Information available to us indicates that there will be no reduction [] communications requirements in the foreseeable future. There exists, however, a gradual reduction in the number of experienced individuals in this field. An effective training program can be used to increase the number of people who can operate and manage [] communications systems. (S) A9C2.2

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Course : TEC-139 (R-390 Receiver Maintenance)

Description : This course is designed to provide the student with knowledge of the signal flow path (emphasis on frequency conversion), typical faults, troubleshooting methods and MWO's. The student will make selected electrical and mechanical adjustments and conduct performance measurements.

Schedule : 4 runnings per year

CY-80 Runnings : 4 (15 students)

Length : 24 hours

Class Size : 2 to 5

Population Trained : 225

Value : Due to the large population trained and the antiquity of the equipment, value is minimal. It may even be detrimental in that today's technical student has little or no background in tube circuitry and regression from solid-state technology may be demotivating.

Recommendation : Cancel the course and rely on the population to maintain the R-390's until replaced by state-of-the-art receivers.

Alternatives : OJT in the field.

Course : TEC-191 (Current Installation Practices)

Description :

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Schedule : 4 runnings per year

CY-80 Runnings : 4 (25 students) - 1 (6 students) - 1 (4 SC-3 contractors)

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Length : 120 hours

Class Size : 4 to 6

Population Trained : 150

Value : Extremely valuable. A basis for the proper installation of our worldwide network.

Recommendation : CIP, the generator course, and the chiller course can be better taught by a UES person, rather than a technician instructor. recommends assigning a UES person to the TTD Instructor Staff which would free up technician trainers for closer related instructional duties.

Alternatives : Reduce the course to a one-week red/blue book standards training scenario and teach practical applications OJT.

Course : TEC-202 (M-28/HW-28 Full Maintenance)

Description : This course covers maintenance, troubleshooting and repair of the M-28 ASR and HW-28. Included are disassembly, assembly and adjustment of the printer, reperforator, TD, keyboard and punch. COMSEC inspection procedures and applicable MWO's are also discussed.

Schedule : 4 runnings per year

CY-80 Runnings : 4 (25 students total)

Length : 160 hours

Class Size : 2 to 8

Population Trained : 239

Value : Disassembly of teletype equipment at Area field stations is no longer required and is not considered cost-effective. Technicians, as well as operators, return defective printers, reperfs, TD's, and other whole components to either Area for repair. STATINTL

Recommendation : This course should be cancelled due to the large number of technicians already trained in full maintenance of teletype equipment. HRD/AEB should be able to assign technicians with full maintenance abilities to those few positions that require full maintenance expertise.

Alternatives : A. External training, coordinated on a demand basis.
B. Reduce training to a Least Replaceable Unit (LRU) for both technicians and operators.

Course : TEC-310 (SC-1 Satellite Terminal Equipment Maintenance)

Description : This course is designed to provide the student with the knowledge of system configuration and the ability to perform overall system maintenance and operation, including the use of related test equipment.

Schedule : 2 runnings per year

CY-80 Runnings : 2 (7 students)

Length : 160 hours

Class Size : 2 to 6

Population Trained : 105

Value : Considering number of technicians trained and the number of terminal breakdowns that require technical assistance, the value is moderate.

Recommendation : The course should be cancelled. HRD/AEB should be able to pick from the numbers already trained in order to meet the Network's needs until all SC-1 terminals are replaced by SC-3 systems.

Alternatives : Reduce the training schedule to a call-up basis.

Course : TEC-320 (SC-2 Satellite Terminal Equipment Maintenance)

Description : This course is designed to provide the student with the knowledge of SC-2 system configuration and the ability to perform fault isolation down to the Least Replaceable Unit (LRU) level.

Schedule : Call-up

CY-8- Runnings : 1 (3 students)

Length : 80 hours

Class Size : 2 to 6

Population Trained : 28

Value : Zero. All SC-2 have been redesigned as SC-4 wideband entry terminals with SC-3 baseband equipment.

Recommendations : Cancel. Start up SC-4 training.

Course : TEC-410 (SKYMUX/MX-113 Limited Maintenance)

Description : This course is designed to provide the student with the knowledge of the purpose and placement of the MX-113 in a communications system. The student will gain the ability to recognize correct programming of all printed circuit boards and channel assignment cards. The student will also be able to recognize proper operations by observing front panel indicators.

Schedule : 2 runnings per year

CY-80 Runnings : 2 (8 students)

Length : 40 hours

Class Size : 2 to 6

Population Trained : 32

Value : The course is a "hands-on" application of the microfiche MX-113 package located at every overseas site.

Recommendation : Cancel residency training and build a self-administered training package that can be used as part of an OJT program in the field.

Alternatives : Reduce to a one-day module and incorporate into the SC-3

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Course : TEC-503 (KY-3 Maintenance)

Description : This course is designed to provide the student with the knowledge of associated logic and schematic diagrams, red/black TEMPEST considerations, switching circuits and capability of call-director. The student will also gain the ability to align and adjust the unit, troubleshoot to the component level, and understand the mandatory MWO's associated with the unit.

Schedule : Call-up

CY-80 Runnings : None

Length : 240 hours

Class Size : 2 to 3

Population Trained : 32

Value : Minimal in the foreign network, moderate in the domestic network.

Recommendation : Cancel. The numbers of technicians trained coupled with the length of training required, makes this course no longer cost-effective to train [redacted] Requirements for this training should be directed [redacted] or some other external training establishment.

Alternatives : None

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Course : TEC-534/535 (KG-34/HN-74 Accelerated Full Maintenance)

Description : This course is designed to provide the student with the knowledge of normal equipment operating procedures, external connections and signal characteristics, red/black concepts, installation and TEMPEST requirements. The student will also gain the ability to troubleshoot the equipment to the board level, adjust power supply voltages, and make necessary clock pulse adjustments.

Schedule : 2 runnings per year

CY-80 Runnings : 1 tutorial (2 students)

Length : 80 hours

Class Size : 2 to 4

Population Trained : 32

Value : Minimal in the foreign network. Moderate in the domestic network.

Recommendation : Cancel. Obtain KG-34 training from NSA.

Alternatives : Since all component repair is presently contracted, an in-depth knowledge of KG-34 maintenance is probably not needed. A reduced self-administered course to be used on-site in DND might be appropriate.

Course : TEC-538 (KW-7 Accelerated Full Maintenance)

Description : This course is designed to provide the student with the knowledge of normal equipment operating procedures, external connections and signal characteristics, TEMPEST and red/black COMSEC criteria, and a detailed signal flow analysis of the KW-7. The student will also gain the ability to perform all adjustments in accordance with specifications, perform modifications and identify those already performed, and troubleshoot the unit to the Least Replaceable Unit (LRU) or board level. The student will also receive a detailed analysis of AK-4 installation.

Schedule : 4 runnings per year

CY-80 Runnings : 4 (18 students)

Length : 120 hours

Class Size : 2 to 6

Population Trained : 205

Value : Due to the number of technicians already trained, the remaining life-span of the KW-7 within the network, and the time expended on full maintenance training, the value is in question.

Recommendation : Cancel and allow the existing trained technician to support the unit until replacement.

Alternatives : Based on approval of NSA, reduce the course to a one-week board swapping exercise.

Course : TEC-600 (EOD Engineer Indoctrination Seminar)

Description : This course is designed to provide the newly hired OC engineer with an overview of the Office of Communications, its missions and staff communications network. The student is given a briefing and an opportunity to operate most of the equipment used in OC's worldwide communications network. In addition, OCHB-F 50.30.2, "Field Station Installation Criteria" and the [] Standards Handbook STATINTL are covered in detail.

Schedule : 2 runnings per year

CY-80 Runnings : 1 (6 students)

Length : 160 hours

Class Size : 2 to 5

Population Trained : 50

Value : While the seminar is beneficial, the cost in plant space and instructor resources for a four-week period makes it questionable.

Recommendation : Reduce the seminar to a three-day orientation program [] followed up with scheduled visits and briefings by all OC components. STATINTL

Alternatives : Conduct a two-week orientation that would include guest lecturers coordinated by the [] Registration and Academic Department (RASD). The reduction would preclude site/component visits.

Course : TEC-801/802 (ARS/MAX Maintenance)

Description : This course is designed to train the student in maintenance computer message switch. In addition to block level instruction, the student is also trained in troubleshooting hardware including all peripheral devices.

Schedule : 1 running of MAX or ARS per year

CY-80 Runnings : 1 (3 students)

Length : 240 hours

Class Size : 2-to 6

Population Trained : 30 on MAX - 17 on ARS

Value : The value is questionable due to the numbers already trained in relation to the time and resources needed to train additional personnel. [] does not have a system to train on and has to rely [] or Headquarters to provide a system to train on. This has an adverse impact on their operational requirements.

Recommendation : Cancel the course and allow a contractor trainer to conduct on-site training. Reduce length of training.

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Course : TEC-803 (Automated Field Terminal (AFT) Limited Maintenance)

Description : This course provides limited maintenance training in the troubleshooting and repair of the AFT System. Included are the Interdata 8/16 Processor Instruction Set, Basic Program Entering, Diagnostic Tests, Disk Drive Maintenance and Alignment, M-40, OCR, and Comline Interfacing, AFT System Operation and Operator Commands.

Schedule : 2 runnings per year

CY-80 Runnings : 2 (5 students) - also field training (8 students)

Length : 160 hours

Class Size : 2 to 4

Population Trained : 18

Value : A very complex system requiring maximum hands-on to retain competence in maintenance abilities. Limited units in selected Areas, i.e.,

Recommendations : Cancel residency training and utilize population trained to support this limited system.

Alternatives : OJT on-site.

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ROUTING AND RECORD SHEET

SUBJECT: (Optional)					Review of Selected Courses [] (C) A9C3.4		STAT NTL	
FROM:				EXTENSION		NO.		
C/Human Resources Division, OC						OCHR-M81-256		
				DATE				
TO: (Officer designation, room number, and building)			DATE		OFFICER'S INITIALS		COMMENTS (Number each comment to show from whom to whom. Draw a line across column after each comment.)	
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1. Chairman, OC Executive Board			25 JUN 1984				[] with supporting company prepared to make presentation. J	
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